

## CLAIMS:

- 1 1. A multimedia network system for inter-connecting a number of receiving and  
2 transmitting digital and/or analogous devices, the network system comprising:
  - 3     ▪ a number of receiving and/or transmitting terminals to be connected to said
  - 4     digital and/or analogous devices,
  - 5     ▪ application specific connector arrangements for connecting said digital and/or
  - 6     analogous devices to said terminals, and
  - 7     ▪ at least one of said connector arrangements being arranged to transmit and/or
  - 8     receive data, said at least one connector arrangement containing data at least
  - 9     about required bandwidth, identification and receiving/transmitting device data
  - 10    format.
- 1 2. The network system of claim 1, wherein said connector arrangements are  
2 connected to said terminals through identical interfaces.
- 1 3. The network system of claim 1, comprising a control logic, for handling one or  
2 several of:
  - 3     ▪ bandwidth allocation request,
  - 4     ▪ group connection set-up,
  - 5     ▪ group address setting,
  - 6     ▪ network status indication,
  - 7     ▪ connection status indication, and
  - 8     ▪ Terminal initiation.
- 1 4. The network system of claim 3, wherein said control logic is provided in at least  
2 one of said terminals and/or at least one of said connector arrangements.
- 1 5. The network system of claim 4, wherein said control logic provided in at least one  
2 connector arrangement being a transmitting connector, handles one or several of:
  - 3     ▪ bandwidth allocation request,
  - 4     ▪ group connection set-up,
  - 5     ▪ network status indication, and
  - 6     ▪ connection status indication.

- 1 6. The network system of claim 4, wherein said control logic is provided in a least  
2 one connector arrangement being a receiving connector handling at least one of:
- 3     ▪ group address setting,
  - 4     ▪ network status indication, and
  - 5     ▪ connection status indication.
- 1 7. The network system of claim 5, wherein said terminal handles at least one of
- 2     ▪ network status indication,
  - 3     ▪ connection status indication, and
  - 4     ▪ terminal initiation at power-up or after disconnection of connector
  - 5     arrangements.
- 1 8. The network system of claim 1, wherein a group of said connector arrangements  
2 consists of one transmitting and at least one receiving connector arrangements  
3 having same identity.
- 1 9. The network system of claim 8, wherein said identity is user and/or at least partly  
2 pre-defined by means of an identification means.
- 1 10. The network system of claim 1, wherein the output from a connector arrangement  
2 connecting a transmitter device is adapted into a digital format, supported by a  
3 source port of a network transceiver in a terminal.
- 1 11. The network system of claim 10, wherein the adaptation is done in a transmitter  
2 adaptation, which is in one side connected to an output of the transmitter and in  
3 other side to a source port of the network transceiver in the terminal.
- 1 12. The network system of claim 11, wherein an adapted data, when inserted into the  
2 network, is captured in said Terminals in the network using an appropriate  
3 receiver connector arrangement where it is adapted back into an original format  
4 and delivered to a receiver device.
- 1 13. The network system of claim 12, wherein the adapted data stream from a  
2 transmitter device is captured in the terminal and adapted back in an receiver

3 adaptation in the receiver connector arrangement and delivered to a receiver  
4 device.

1 14. The network system of claim 1, wherein signals from several devices are  
2 transmitted simultaneously through the network.

1 15. The network system of claim 1, wherein each connector arrangement comprises an  
2 identification set arrangement to configure receivers to corresponding transmitters.

1 16. The network system of claim 1, wherein a connector arrangement comprises  
2 means to receive an analogue signal, means for converting said signal to a digital  
3 signal and means to transmit said digital signal on said network.

1 17. The network system of claim 1, wherein a connector arrangement comprises  
2 means to receive an digital signal from said network, means for converting said  
3 signal to an analogue signal and means to couple said analogue signal to an  
4 analogue device.

1 18. The network system of claim 16, wherein said analogue signal is one of audio or  
2 video signals, which can be compressed and/or encoded.

1 19. The network system of claim 10, wherein said identification elements comprise  
2 switches for setting unique identities for transmitting and receiving connector  
3 arrangements.

1 20. The network system of claim 1, wherein said connector arrangement comprises  
2 information member informing about accessibility and/or type of connection.

1 21. The network system of claim 1, said terminals and/or connector arrangements are  
2 identical.

1 22. The network system of claim 1, wherein a connector arrangement identifies a  
2 network capacity and characteristic before transmitting on the network.

1 23. The network system of claim 1, wherein said network has one of a ring or star-  
2 topology.

- 1 24. The network system of claim 1, wherein said terminals are arranged in series  
2 and/or parallel.
- 1 25. The network system of claim 1, wherein said network is implemented as one of  
2 MOSTnet or IEEE 1394.
- 1 26. The network system of claim 1, wherein said terminal and connector arrangement  
2 are integrated.
- 1 27. The network system of claim 1, wherein at said terminals and connector  
2 arrangements are powered through same source.
- 1 28. The network system of claim 1, wherein connector arrangements are arranged in  
2 said digital and/or analogous device.
- 1 29. The network system of claim 1, wherein the system comprises wireless connection  
2 between connector arrangements and/or terminals.
- 1 30. The network system of claim 1, wherein the network is accessed externally.
- 1 31. The network system according to claim 19, wherein said identification element is  
2 controlled remotely.
- 1 32. The network system of claim 1, wherein said terminals and connector  
2 arrangements are connected wirelessly.
- 1 33. A connector arrangement for use in a network system for inter-connecting a  
2 number of receiving and transmitting digital and/or analogous devices, the network  
3 system comprising:
- 4     ▪ a number of receiving and/or transmitting terminals to be connected to said  
5       digital and/or analogous devices,
  - 6     ▪ application specific connector arrangements for connecting said digital and/or  
7       analogous devices to said terminals, and
  - 8     ▪ at least one of said connector arrangements being arranged to transmit and/or  
9       receive data, said at least one connector arrangement containing data at least

10           about required bandwidth, identification and receiving/transmitting device data  
11           format,

12       said connector arrangement comprising:

- 13       • a controller,
- 14       • a receiver and/or,
- 15       • a transmitter adopter,
- 16       • identification means, and
- 17       • physical connectors for connecting to said devices.

1   34. The connector arrangement of claim 33 arranged in a digital and/or analogues  
2   device.

1   35. A terminal for use in a network system for inter-connecting a number of receiving  
2   and transmitting digital and/or analogous devices, the network system comprising:

- 3       ▪ a number of receiving and/or transmitting terminals to be connected to said  
4       digital and/or analogous devices,
- 5       ▪ application specific connector arrangements for connecting said digital and/or  
6       analogous devices to said terminals, and
- 7       ▪ at least one of said connector arrangements being arranged to transmit and/or  
8       receive data, said at least one connector arrangement containing data at least  
9       about required bandwidth, identification and receiving/transmitting device data  
10      format,

11   said terminal comprising a controller and a transceiver.

1   36. The terminal of claim 35, comprising Control Ports and source ports configured in  
2   either serial or parallel mode.

1   37. A method of inter-connecting a number of receiving and transmitting digital  
2   and/or analogous devices, the method comprising the steps of providing:

- 3       • a network system,
- 4       • a number of receiving and/or transmitting terminals to be connected to said  
5       digital and/or analogous devices,

- 6       • application specific connector arrangements for connecting said digital  
7       and/or analogous devices to said terminals, and
- 8       • arranging at least one of said connector arrangements to transmit and/or  
9       receive data, wherein at least one connector arrangement contains data at  
10      least about required bandwidth, identification and receiving/transmitting  
11      device data format.

1   38. A computer program product in a computer unit for controlling and/or monitoring  
2   a network system for inter-connecting a number of receiving and transmitting digital  
3   and/or analogous devices, the network system comprising:

- 4       ▪ a number of receiving and/or transmitting terminals to be connected to said  
5       digital and/or analogous devices,
- 6       ▪ application specific connector arrangements for connecting said digital and/or  
7       analogous devices to said terminals, and
- 8       ▪ at least one of said connector arrangements being arranged to transmit and/or  
9       receive data, said at least one connector arrangement containing data at least about  
10      required bandwidth, identification and receiving/transmitting device data format, said.